

REMARKS

In this Response to Office Action the Applicant amends the CROSS REFERENCES TO RELATED APPLICATIONS section paragraph to definitely reflect its relationship to original U.S. Patent Application Ser. No. 09/927,763 filed August 10, 2001, now U.S. Patent No. 6,647,771 B2 granted November 18, 2003 entitled 'EXTERNAL PRESSURE DISPLAY FOR VEHICLE TIRES', and the original parent U.S. Provisional Patent Application Serial No. 60/228,941 filed August 30, 2000." As pointed out, in the preliminary remarks, Applicant's current application is entitled to the benefit of at least the August 10, 2001 filing date of his prior SN09/927,763 application.

The Applicant also amends specification paragraph at page 9, line 29 thru page 10, line 15 correcting figure reference number errors and rewriting a clumsy sentence.

In the claims the Applicant currently: (i) amends Claim 2 to properly recite a limitation previously without an antecedent basis; (ii) cancels dependent Claims 12 and 13 presenting the subject matter thereof respectively, in new independent claims 18 & 19 each of which that incorporate the limitations of independent claim 1 and dependant claim 7 for overcoming the objections of Examiner Allen to patentability of the inventions so claimed; (iii) amends dependent claims 14 and 16 to more clearly recite particular limitations for providing a visual display of magnetic field direction; and (iv) amends dependent claims 15 and 17 to correct grammar errors and to eliminate an unnecessary definite article.

An Information Disclosure Statement by Applicant [PTO/SB/08A (07-05)] citing U.S. Patent No. 4,896,103, *Shimanuki et al* issued 01/23/1990 mentioned in the Preliminary Remarks is submitted herewith.

As pointed out in the Preliminary Remarks, neither *Nagatsuma et al* nor in *Shimanuki et al* disclose or suggest a sensor for displaying magnetic field direction. In fact, beginning at Col. 4, line 8 *Nagatsuma et al* recites that :

"The magnetic field measuring apparatus comprises a light source A, a magnetic field detector B, a measuring unit C and a light transmission unit D. The light source includes a light emitting diode 1 (wavelength 0.83 82 m). The magnetic field detector includes rod lenses 2-1 and 2-2, a polarizer 3, four magnetic films 4 and an analyzer 5. In the measuring unit, a light is received by a photo-diode 6 and a DC component and an AC component (signal component) are detected by a DC component detector 7 and an AC component detector 8, and a ratio of those components are calculated by a calculating circuit 9. The light transmission unit includes a multimode optical fiber having a core diameter of about 400 μ m."

As explained in *Shimanuki et al* beginning at col. 7, line 40:

With a magnetic field sensor of this kind, since the easy axis of magnetization of the magneto-optic element (Faraday element) is at right angles to the direction of the magnetic field to be measured, the magnetization component in the direction of the magnetic field to be measured is produced by a mechanism of the magnetic rotation magnetic and this magnetization component changes linearly in proportion to the size of the magnetic field to be measured, right up to high magnetic fields. (Emphasis added)

Nor do the above references describe a mechanism for, or even an appreciation of the possibility of measuring light transmission through the described sensors as a function of changes in direction of the supplied magnetic field. Nor does either reference discuss, or suggest that changes in direction of a supplied magnetic field could be sensed or measured with sensors having a "Faraday" magneto-optic element.

As currently amended, claims 1-5 and 7 each recite a method for displaying magnetic field direction that includes, as an express limitation/step, measurement of light transmission through the magneto-optic cell in relation to changes in magnetic field direction, not magnitude. Dependent claim 4 in addition, recites a reflecting cell wall, not described as an element functionally or otherwise in either reference. Accordingly, the Applicant respectfully submits that neither *Nagatsuma et al* nor in *Shimanuki et al* anticipate the Applicant's invention as claimed in claims 1-5 & 7 pursuant 35 U.S.C. § 102. [See *Paeco, Inc. v. Applied Moldings, Inc.*, C.A.3 (Pa.) 1977, 562 F.2d 870, 194 U.S.P.Q. 353.]

Also, as pointed out in the Preliminary Remarks, U.S. Patent Application Publication No. US 2003/0090012, *Allen et al* filed September 27, 2001 and published on May 15, 2003 is not a prior art reference that can be used to negate patentability of the inventions claimed in Applicant's current application under the obviousness criteria of 35 U.S.C. § 103 because the current application is entitled to the benefit of the August 10, 2001 filing date of Applicants original SN09/927,763 application as a divisional application [See 35 U.S.C. §121]. Accordingly the Applicant respectfully submits currently amended claims 6, and 8-11 satisfy the criteria for patentability under 35 U.S.C. § 103.

New independent Claims 18 and 19 recite the limitations expressed in original independent claims 1, dependent claim 7 and canceled dependent claims 12 and 13, respectively, overcoming the Examiner's objections to patentability in view of the references cited.

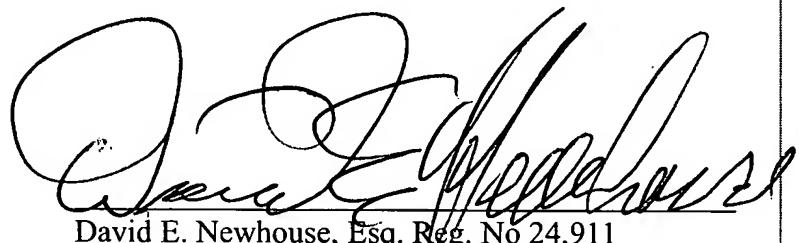
Finally, the Applicant respectfully submits currently amended dependent claims 14 -17, are in a condition to be allowed as they incorporate limitations of independent claim 1 and amended dependent claim 2 that, for the reasons stated above, meet the condition for patentability over the cited references.

CONCLUSION

As currently amended presenting claims 1-11 and 14-19 this application meets the criteria for patentability under 35 U.S.C. §§ 102 & 103. Accordingly, a Notice of Allowance is respectfully solicited.

I hereby certify that Response to Office Action together with the identified enclosures are being deposited in San Mateo, Ca., postage prepaid, with the US. Postal Service FIRST CLASS MAIL in an envelope addressed to : Mail Stop Amendment Commissioner of Patents P.O. Box 1450 Alexandria VA 22313-1450 on October 7, 2005 before 5:00 PM PDT

Dated: October 7, 2005



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